

**REMARKS**

Applicant thanks the Examiner for his thoughtful review of the present application.  
The status of the claims is as follows:

- a. **Claims 1-35** are **Pending** in the present application.
- b. **Claims 1-35** are rejected.
- c. Independent **Claims 1, 12, 17, 24** and **30** have been amended for clarification to recite "...wherein the market imbalance factor is a function of an index price of energy".

i. **PRESENT AMENDMENT**

Independent **Claims 1, 12, 17, 24** and **30** were amended to distinctly point out and particularly claim the subject matter the Applicant regards as his invention. Specifically, those claims have been amended to recite "...wherein the market imbalance factor is a function of an index price of energy". Support for the amendments to **Claims 1, 12, 17, 24** and **30** can at least be found on **Page 10, lines 3-17** of the **Detailed Description**. No new matter has been introduced with the amendment of this application.

ii. **ARGUMENT**

**1. Claim Rejections - 35 U.S.C. §101**

a. **Claims 1-23 and 30-35 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.**

Applicant respectfully asserts that **Claims 1, 12, 17 and 30** have been amended to address the Examiner's rejections under **35 U.S.C. §101**. Consequently, the Examiner's rejections are no longer applicable.

**2. Claim Rejections - 35 U.S.C. §103**

The standard for making an obviousness rejection is currently set forth in MPEP 706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. **First**, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. **Second**, there must be a reasonable expectation of success. **Finally**, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The ***teaching or suggestion*** to make the claimed combination **and the *reasonable expectation of success* must both be found in the prior art, and not based on applicant's disclosure.** (emphasis and formatting added) MPEP § 2143, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a ***convincing line of reasoning*** as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). (emphasis added).

See also, *KSR International Co. v. Teleflex Inc.*, No. 04-1350, 550 U.S. \_\_ (2007).

The Office Action fails to meet this burden. As noted above, the PTO has the burden of establishing a *prima facie* case of obviousness under 35 USC §103. The Patent Office must show that some reason to combine the elements with some rational underpinning that would lead an individual of ordinary skill in the art to combine the relevant teachings

of the references. *KSR International Co. v. Teleflex Inc.*, No. 04-1350, 550 U.S. \_\_\_ (2007); *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988). Therefore, a combination of relevant teachings alone is insufficient grounds to establish obviousness, absent some reason for one of ordinary skill in the art to do so. *Fine* at 1075. In this case, the Examiner has not pointed to any cogent, supportable reason that would lead an artisan of ordinary skill in the art to come up with the claimed invention.

As illustrated below, *Subramanian* fails to teach or suggest the implementation of a market imbalance factor, and no combination of additional references appear to spontaneously overcome the absence of this key element. Moreover, as is further discussed below, none of the references, alone or in combination, teaches the unique features called for in the claims. It is impermissible hindsight reasoning to pick a feature here and there from among the references to construct a hypothetical combination which obviates the claims.

It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. [citation omitted]

*In re Gordon*, 18 USPQ.2d 1885, 1888 (Fed. Cir. 1991).

A large number of devices may exist in the prior art where, if the prior art be disregarded as to its content, purpose, mode of operation and general context, the several elements claimed by the applicant, if taken individually, may be disclosed. However, the important thing to recognize is that the reason for combining these elements in any way to meet Applicants' claims only becomes obvious, if at all, when considered from hindsight in the light of the application disclosure. The Federal Circuit has stressed that the "decisionmaker must step backward in time and into the shoes worn by a person having ordinary skill in the art when the invention was unknown and just before it was made." *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1566 (Fed. Cir. 1987). To do otherwise would be to apply hindsight reconstruction, which has been strongly discouraged by the Federal Circuit. *Id.* at 1568.

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

*W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983).

Therefore, without some reason in the references to combine the cited prior art teachings, with some rational underpinnings for such a reason, the Examiner's conclusory statements in support of the alleged combination fail to establish a prima facie case for obviousness. See, *KSR International Co. v. Teleflex Inc.*, No. 04-1350, 550 U.S. \_\_ (2007) (obviousness determination requires looking at "whether there was an apparent reason to combine the known elements in the fashion claimed...", citing *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness," KSR at 14).

**a. Rejection of Claims 1-9, 12-21, 24-28 and 30-35 under 35 U.S.C. §103(a) (236, 677 References)**

The Applicant respectfully traverses the rejection of **Claims 1-9, 12-21, 24-28 and 30-35** as being unpatentable over Published U.S. Application **2004/0117236** to *Subramanian* in view of Published U.S. Application **2003/0055677** to *Brown*.

In accordance with *Subramanian*, a method is provided to determine a lowest utility cost relative to a plurality of utility rate structures, to an estimated customer load, and to a temporal resolution of a Contract Base Load. The method comprises the following: computing a plurality of utility costs based on combinations of each of the rate structures, the estimated customer load, and the temporal resolution of the Contract Base Load and, selecting the rate structure and Contract Base Load producing the lowest utility cost. However, the Examiner asserts that *Subramanian* does not explicitly disclose that the at least one variable factor is a market imbalance as recited in the independent claims of the present invention.

In this particular instance, the Examiner purports to combine the *Brown* reference with the *Subramanian* reference to cure *Subramanian's* above-delineated defect. *Brown* generally discloses an Internet-based utility management system that presents estimated utility prices, usage terms, and a predicted load profile to a customer. The estimated utility prices include predicted prices of a utility during certain future periods of time. The usage terms include a utility usage threshold for each certain future period of time below which the estimated price applies. The predicted load profile includes predicted utility usage of

the customer for each certain future period of time and presented such that any variation between the usage terms and the predicted load profile is readily apparent.

The Examiner asserts that *Brown* discloses calculating a market imbalance factor (i.e. predicted utility margins)[paragraph 0048] for the future period based on data associated with the past period [paragraph 0011, paragraph 0044]. In accordance with *Brown*, the predicted utility margins represent the difference between utility usage and the usage terms. See *Brown* paragraph 0047 reproduced herein below:

Next, predicted utility margins are presented (step 420). In general, the predicted utility margins 420 include the deviation of the predicted load profile 415 from the usage terms 410 for a certain time period. For example, *the predicted utility margins 420 may represent the difference between the predicted utility usage and the usage terms 410 (e.g., CUB) at each hour (or other time interval) for the next day.* The predicted utility margins 420 may be presented with the estimated utility prices 405, the usage terms 410, and/or the predicted load profile 415 to illustrate the incremental and/or total variation between the usage terms 410 and the predicted load profile 415 for each hour (or other time period) of the next day. (Emphasis added.)

Here, the Examiner is equating the predicted utility margins of *Subramania* with the market imbalance factor recited in the independent claims of the present invention. According to *Brown*, the predicted utility margins represents the difference between the predicted utility usage and the usage terms. However, the independent claims have been amended to recite the limitation "...wherein the market imbalance factor is a function of an index price of energy...".

In an embodiment of the present invention, the market imbalance factor is calculated based on the following relationship:

$$M_i = (V_B - V_i) * x_i$$

where  $M_i$  is the market imbalance factor for the cell  $i$  in the data consumption matrix,  $V_i$  is the actual volume of energy consumption for the cell  $i$ , and  $x_i$  is the index price of energy on the

imbalance market for the cell *i*. (It should be noted that a cell represents an hour block in the data consumption matrix.) In an embodiment, the index prices of energy on the imbalance market are California Independent System Operator (Cal-ISO) index prices and are publicly available. *Brown* deals with predicted utility usage and the usage terms and does not teach or suggest the limitation "...wherein the market imbalance factor is a function of an index price of energy..." as recited in the independent **Claims 1, 12, 17, 24 and 30** of the present invention.

Consequently, since *Brown* does not teach or suggest the limitation "...wherein the market imbalance factor is a function of an index price of energy..." as recited in the independent claims of the present invention, Applicant respectfully asserts that the Examiner's proposed combination of references does not teach or suggest each claim limitation as recited in the independent **Claims 1, 12, 17, 24 and 30** of the present invention. There the rejection of independent **Claims 1, 12, 17, 24 and 30** as being unpatentable over Published U.S. Application **2004/0117236** to *Subramanian* in view of Published U.S. Application **2003/0055677** to *Brown* under **35 U.S.C. §103(a)** should be withdrawn.

**Claims 2-8, 13-16, 18-21, 25-28 and 31-35** depend from independent **Claims 1, 12, 17, 24 and 30** respectively and inherit all of their limitations. Therefore, **Claims 2-8, 13-16, 18-21, 25-28 and 31-35** are also patentably distinct in light of Published U.S. Application **2004/0117236** to *Subramanian* in view of Published U.S. Application **2003/0055677** to *Brown* and the rejections of **Claims 2-8, 13-16, 18-21, 25-28 and 31-35** under **35 U.S.C. §103(a)** ought to now be withdrawn.

**b. Rejections of Claims 10, 11, 22, 23 and 29 under 35 U.S.C. §103(a) (236, 677, 889 References)**

The Applicant respectfully traverses the rejection of **Claims 10, 11, 22, 23 and 29** as being unpatentable over Published U.S. Application **2004/0117236** to *Subramanian* in view of Published U.S. Application **2003/0055677** to *Brown* in further view of US Patent **6,366,889** to *Zaloom*.

**Claims 10, 11, 22, 23 and 29** depend from independent **Claims 1, 17 and 24** respectively and inherit all of their limitations. Therefore, **Claims 10, 11, 22, 23 and 29**

are also patentably distinct in light of Published U.S. Application **2004/0117236** to *Subramanian* in view of Published U.S. Application **2003/0055677** to *Brown* in further view of US Patent **6,366,889** to *Zaloom* and the rejections of **Claims 10, 11, 22, 23 and 29** under **35 U.S.C. §103(a)** ought to now be withdrawn.

iii. **CONCLUSION**

Applicant now believes the present case to be in condition for allowance. Therefore, the Applicant respectfully requests a Notice of Allowance for this application from the Examiner.

It is believed that all of the pending Claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending Claims (or other Claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any Claim, except as specifically stated in this paper, and the amendment of any Claim does not necessarily signify concession of unpatentability of the Claim prior to its amendment.

Applicant believes that no fees are currently due, however, should any fee be deemed necessary in connection with this Amendment and Response, the Commissioner is authorized to charge deposit account 08-2025.

Respectfully submitted,

/wendell j. jones/

Wendell J. Jones

Reg. No. **45,961**